#### Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

(Currently Amended) A compound of formula (I).

$$\begin{array}{c} R^4 \\ R^2 \\ R^5 \\ R^6 \end{array} \begin{array}{c} (CH_2)_n \\ X \\ \end{array} \begin{array}{c} H \\ N \\ R^1 \end{array} \hspace{0.5cm} (I)$$

the N-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or  $CR^7$ , wherein  $R^7$  is hydrogen or taken together with  $R^1$  may form a bivalent radical of formula -CH=CH-CH=CH-;

R1 is C1.6alkyl

 $R^2$  is hydrogen, hydroxy,  $C_{1\cdot 6}$ alkyl,  $\underline{or}$   $C_{3\cdot 6}$ alkynyl  $\underline{or}$  taken together with  $R^3$ -may form =0;

R3 is a radical selected from

wherein

s is 0, 1, 2 or 3;

R8 is -CHO, C1-6alkyl, hydroxyC1-6alkyl, C1-6alkylcarbonyl,

 $di(C_{1-6}alkyl)aminoC_{1-6}alkyl, C_{1-6}alkyl, C_{1-6}alkyl, C_{1-6}alkyl, C_{1-6}alkyl, piperidinylC_{1-6}alkyl, pip$ 

thienylC1-6alkyl, pyrrolylC1-6alkyl, arylC1-6alkylpiperidinyl,

arylcarbonylC1-6alkyl, arylcarbonylpiperidinylC1-6alkyl,

haloindozolylpiperidinylC1-6alkyl, or

arylC1-6alkyl(C1-6alkyl)aminoC1-6alkyl;

R9 is hydrogen or C1-6alkyl; and

 $R^{10}$  is  $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl or di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl;

or R3 is a group of formula

wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from

wherein each R<sup>12</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

$$-C_{1,6}$$
alkanediyl $-N$ ,  $-C_{1,6}$ alkanediyl $-N$ 

$$\begin{split} &C_{1:6}alkyloxyC_{1:6}alkyl, C_{1:6}alkyloxyC_{1:6}alkylamino, di(phenylC_{2:6}alkenyl),\\ &piperidinylC_{1:6}alkyl, C_{3:10}cycloalkyl, C_{3:10}cycloalkylC_{1:6}alkyl,\\ &aryloxy(hydroxy)C_{1:6}alkyl, haloindazolyl, arylC_{1:6}alkyl, arylC_{2:6}alkenyl, morpholino,\\ &C_{1:6}alkylimidazolyl, or pyridinylC_{1:6}alkylamino; and\\ &each R^{13} independently is hydrogen, piperidinyl or aryl; \end{split}$$

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R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxy, di(C<sub>1-6</sub>alkyl)amino, di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyloxy or C<sub>1-6</sub>alkyloxycarbonyl; or

when  $R^5$  and  $R^6$  are on adjacent positions they may taken together form a bivalent radical of formula

aryl is phenyl or phenyl substituted with halo, C1-6alkyl or C1-6alkyloxy;

# with the proviso that when

- n is 0, X is N,  $R^1$  is  $C_{16}$ alkyl,  $R^2$  is hydrogen,  $R^3$  is a group of formula (b-1), t is 0, Z is the heterocyclic ring system (c-2) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and  $R^{12}$  is hydrogen; then at least one of the substituents  $R^4$ ,  $R^5$  or  $R^6$  is other than hydrogen, halo,  $C_{16}$ alkyl or  $C_{16}$ alkyloxy and that 7-benzoyl 3 methyl 2(1H) quinoxalinone is excluded.
- 2. (Original) A compound as claimed in claim 1 wherein n is 0 or 1; X is N or  $\mathbb{CR}^7$ , wherein  $\mathbb{R}^7$  is hydrogen;  $\mathbb{R}^3$  is  $\mathbb{C}_{1\text{-}6}$ alkyl;  $\mathbb{R}^2$  is hydrogen;  $\mathbb{R}^3$  is a radical selected from (a-1) or (a-2) or is group of formula (b-1); s is 0, 1 or 2;  $\mathbb{R}^3$  is  $\mathbb{C}_{1\text{-}6}$ alkyl or  $\mathbb{C}_{1\text{-}6}$ alkyl)amino $\mathbb{C}_{1\text{-}6}$ alkyl; t is 0, 1 or 2;  $\mathbb{Z}$  is a heterocyclic ring system selected from (c-1), (c-2), (c-3), (c-4), (c-5) or (c-11); each  $\mathbb{R}^{12}$  independently is hydrogen or  $\mathbb{C}_{1\text{-}6}$ alkyloxy $\mathbb{C}_{1\text{-}6}$ alkylamino; each  $\mathbb{R}^{13}$  independently is hydrogen; and  $\mathbb{R}^4$ ,  $\mathbb{R}^5$  and  $\mathbb{R}^6$  are each independently selected from hydrogen, halo or  $\mathbb{C}_{1\text{-}6}$ alkyl.
- 3. (Previously Presented) A compound according to claim 1 wherein n is 0 or 1; X is N;  $R^1$  is  $C_{1,6}$ alkyl;  $R^2$  is hydrogen;  $R^3$  is a radical of formula (a-1) or is a group of formula (b-1); s is 0;  $R^3$  is  $arylC_{1,6}$ alkyl( $C_{1,6}$ alkyl)amino $C_{1,6}$ alkyl; is 0; Z is a heterocyclic ring system selected from (c-1) or (c-2); each  $R^{12}$  independently is hydrogen or  $C_{1,6}$ alkyloxy $C_{1,6}$ alkylamino; each  $R^{13}$  independently is hydrogen; and  $R^4$ ,  $R^5$  and  $R^6$  are each independently selected from hydrogen or halo.

4. (Previously Presented) A compound selected from compound No 5, compound No 9, compound No 1 and compound No 1:

and the N-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof

#### (Cancelled)

(Previously Presented) A pharmaceutical composition comprising a
pharmaceutically acceptable carrier and as an active ingredient a therapeutically effective
amount of a compound according to claim 1.

### (Cancelled)

 (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of formula (I)

$$R^4$$
 $R^3$ 
 $R^3$ 

the N-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR<sup>7</sup>, wherein R<sup>7</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

R1 is C1-6alkyl

R<sup>2</sup> is hydrogen, hydroxy, C<sub>1-6</sub>alkyl, C<sub>3-6</sub>alkynyl or taken together with R<sup>3</sup> may form =O;

R3 is a radical selected from

 $-(CH_2)_{S}-NR^8R^9$  (a-1),

-O-H (a-2)<u>, or</u>

-O-R<sup>10</sup> (a-3),

wherein

s is 0, 1, 2 or 3;

R8 is -CHO, C1-6alkyl, hydroxyC1-6alkyl, C1-6alkylcarbonyl,

di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl, c<sub>1-6</sub>alkyl, piperidinylC<sub>1-6</sub>alkyl, piperidinylC<sub>1-6</sub>alkyl

thienyl $C_{1\text{--}6}$ alkyl, pyrrolyl $C_{1\text{--}6}$ alkyl, aryl $C_{1\text{--}6}$ alkylpiperidinyl,

 $arylcarbonyl C_{1\text{--}6} alkyl, arylcarbonyl piperidinyl C_{1\text{--}6} alkyl,\\$ 

 $halo indozolyl piperidinyl C_{1\text{--}6} alkyl, or$ 

 $arylC_{1\text{--}6}alkyl(C_{1\text{--}6}alkyl)aminoC_{1\text{--}6}alkyl;$ 

R9 is hydrogen or C1-6alkyl; and

 $R^{10}\, is\, C_{1\text{-}6} alkyl,\, C_{1\text{-}6} alkyl carbonyl\, or\, di(C_{1\text{-}6} alkyl) amino C_{1\text{-}6} alkyl;$ 

or R3 is a group of formula

 $-(CH_2)_t$ -Z- (b-1),

wherein

(c-11)

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from

wherein each R<sup>12</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

$$\begin{split} &C_{16}alkyloxyC_{16}alkyl, C_{16}alkyloxyC_{16}alkylamino, di(phenylC_{26}alkenyl),\\ &piperidinylC_{16}alkyl, C_{3-10}cycloalkyl, C_{3-10}cycloalkylC_{16}alkyl,\\ &aryloxy(hydroxy)C_{16}alkyl, haloindazolyl, arylC_{16}alkyl, arylC_{26}alkenyl, morpholino,\\ &C_{16}alkylimidazolyl, or pyridinylC_{16}alkylamino; and\\ &each R^{13} independently is hydrogen, piperidinyl or aryl; \end{split}$$

 $R^4, R^5$  and  $R^6$  are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy,  $C_{1.6}$ alkyl,  $C_{1.6}$ alkyloxy, di( $C_{1.6}$ alkyl)amino, di( $C_{1.6}$ alkyl)amino $C_{1.6}$ alkyloxy or  $C_{1.6}$ alkyloxycarbonyl; or

when  $R^5$  and  $R^6$  are on adjacent positions they may taken together form a bivalent radical of formula

$$-O-CH_2-O$$
 (d-1),  
 $-O-(CH_2)_2-O-$  (d-2),  
 $-CH=CH-CH=CH-$  (d-3), or  
 $-NH-C(O)-NR^{14}=CH-$  (d-4),  
wherein  $R^{14}$  is  $C_{L6}$ alkyl:

aryl is phenyl or phenyl substituted with halo, C1-6alkyl or C1-6alkyloxy.

## 9. (Cancelled)

- 10. (Withdrawn) A method for enhancing the effectiveness of chemotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.
- 11. (Withdrawn) A method for enhancing the effectiveness of radiotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- 12. (Withdrawn) A combination of a compound of formula (I) with a chemotherapeutic agent

the N-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

X is N or CR7, wherein R7 is hydrogen or taken together with R1 may form a bivalent radical of formula -CH=CH-CH=CH-:

R1 is C1.6alkvl or thienvl;

R<sup>2</sup> is hydrogen, hydroxy, C<sub>1-6</sub>alkyl, C<sub>3-6</sub>alkynyl or taken together with R<sup>3</sup> may form =O;

R3 is a radical selected from

wherein

s is 0, 1, 2 or 3:

R8-and R10 are each independently selected from -CHO, C1-6alkyl,

hydroxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylcarbonyl, amino, C<sub>1-6</sub>alkylamino,

di(C1-salkyl)aminoC1-salkyl, C1-salkyloxycarbonyl, C1-salkylcarbonylaminoC1-salkyl,

piperidinylC1\_6alkylaminocarbonyl, piperidinyl, piperidinylC1\_6alkyl, piperidinylC<sub>1-6</sub>alkylaminocarbonyl, C<sub>1-6</sub>alkyloxy, thienylC<sub>1-6</sub>alkyl,

pyrrolylC1\_salkyl, arylC1\_salkylpiperidinyl, arylcarbonylC1\_salkyl,

arvlcarbonvlpiperidinylC<sub>1-6</sub>alkyl, haloindozolylpiperidinylC<sub>1-6</sub>alkyl, or

arylC1-6alkyl(C1-6alkyl)aminoC1-6alkyl; and

R9 is hydrogen or C1.6alkyl;

or R3 is a group of formula

wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from

$$R^{12}$$
  $R^{12}$   $R$ 

$$R^{12}$$
  $HN$   $NH$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$   $R^{12}$ 

wherein each R12 independently is hydrogen, halo, C1-6alkyl, aminocarbonyl, amino,

C<sub>1-6</sub>alkylaminoC<sub>1-6</sub>alkyloxy, C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxyC<sub>1-6</sub>alkylamino, arylC<sub>1-6</sub>alkyl, di(phenylC<sub>2-6</sub>alkenyl), piperidinylC<sub>1-6</sub>alkyl,

 $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl $C_{1-6}$ alkyl, aryloxy(hydroxy) $C_{1-6}$ alkyl, haloindazolyl, aryl $C_{1-6}$ alkyl, aryl $C_{1-6}$ alkyl, aryl $C_{1-6}$ alkylamino, morpholino,  $C_{1-6}$ alkylimidazolyl, or pyridinyl $C_{1-6}$ alkylamino;

each R<sup>13</sup> independently is hydrogen, piperidinyl or aryl;

R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxy, amino, aminoC<sub>1-6</sub>alkyl, di(C<sub>1-6</sub>alkyl)amino, di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyloxy or C<sub>1-6</sub>alkyloxycarbonyl, or C<sub>1-6</sub>alkyl substituted with 1, 2 or 3 substituents independently selected from hydroxy, C<sub>1-6</sub>alkyloxy, or aminoC<sub>1-6</sub>alkyloxy; or

when  $R^5$  and  $R^6$  are on adjacent positions they may taken together form a bivalent radical of formula

-O-CH<sub>2</sub>-O (d-1),

-O-(CH<sub>2</sub>)<sub>2</sub>-O- (d-2),

-CH=CH-CH=CH- (d-3), or

-NH-C(O)-NR<sup>14</sup>=CH- (d-4),

wherein R14 is C1-6alkyl;

aryl is phenyl or phenyl substituted with halo, C1-6alkyl or C1-6alkyloxy.

13. (Withdrawn) A process for preparation of a compound as claimed in claim 1, comprising

a) hydrolysis of intermediates of formula (VIII),

b) cyclization of intermediates of formula (X), into compounds of formula (I) wherein X is CH, herein referred to as compounds of formula (I-j), and s.

$$\mathbb{R}^{4} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{3} \xrightarrow{(CH_{2})_{n}} \mathbb{N}H \xrightarrow{C-C\mathbb{R}^{1} = C-C_{0}H_{5}} \mathbb{R}^{4} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{3} \xrightarrow{(CH_{2})_{n}} \mathbb{N} \xrightarrow{H} \mathbb{N} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{3}$$

$$(X) \qquad (I-j)$$

c) condensation of an appropriate ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R<sup>h</sup> is C<sub>1-6</sub>alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i), in the presence of a carboxylic acid.

$$\underset{R^{5}}{\overset{R^{2}}{\underset{R^{6}}{\bigcap}}} \overset{(CH_{2})_{h}}{\underset{NH_{2}}{\bigcap}} \overset{NH_{2}}{\underset{NH_{2}}{\bigcap}} = \underset{R^{5}}{\overset{O}{\bigcap}} \overset{R^{4}}{\underset{R^{6}}{\bigcap}} \overset{R^{2}}{\underset{R^{6}}{\bigcap}} \overset{(L4)}{\underset{N}{\bigcap}} \overset{H}{\underset{N}{\bigcap}} \overset{O}{\underset{N}{\bigcap}} \overset{O}{\underset{N}{\longrightarrow}} \overset{O}{\underset{N}{\longrightarrow}}$$

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14. (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 2.

- (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 3.
- (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 4.
- 17. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 2.
- 18. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.
- 19. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- (Withdrawn) A method of treating in a subject a PARP mediated disorder, said
  method comprising administering to the subject a therapeutically effective amount of a
  compound of claim 3.
- 21. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.

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22. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

- 23. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 4.
- 24. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.
- 25. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 2.
- 27. (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 3.
- 28. (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 4.
- 29. (Previously Presented) A product made by the process of claim 13.
- 30. (Cancelled)